## Approved Mitigation Banks in North Carolina.

Pursuant to the Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation Under the Clean Water Act 404(b)(1) Guidelines (06Feb90), mitigation banking may be an acceptable form of compensatory mitigation under specific criteria designed to ensure an environmentally successful bank. Where a mitigation bank has been approved by the Corps and EPA for purposes of providing compensatory mitigation for specific identified projects, use of that mitigation bank for those particular projects is considered as meeting the objectives of Section II.C.3 of the MOA.

Pursuant to the Federal Guidance for the Establishment, Use and Operation of Mitigation Banks, 60 FR 228, pp. 58605-58614 (28Nov95), a mitigation bank is defined as a site where wetlands and/or other aquatic resources are restored, created, enhanced, or in exceptional circumstances, preserved expressly for the purpose of providing compensatory mitigation in advance of authorized impacts to similar resources. For purposes of Section 10/404, use of a mitigation bank may only be authorized when impacts are unavoidable.

- I. Fundamental Requirements of Mitigation Banks in North Carolina. The following are minimum requirements that will be used by the Mitigation Bank Review Team (MBRT) during its initial evaluation of all mitigation bank proposals. It is important for prospective bankers to note that mitigation bank proposals failing to meet one, or more, of the following requirements may not receive favorable consideration as a mitigation bank.
  - The bank will improve ecological conditions of the regional watershed;
  - The bank will provide viable and sustainable ecological and hydrological functions for the proposed mitigation bank service area;
  - The bank will be effectively managed in perpetuity;
  - Construction of the bank will not destroy or degrade areas with high ecological value;
  - The bank has a high probability of meeting the prescribed success criteria;
  - The bank will meet the requirements of all other applicable federal and state laws;
  - Adjacent land uses will not adversely affect the perpetual viability of the mitigation bank;
  - The bank sponsor must be able to meet the prescribed financial responsibility requirements.

II. Basic Standards. Each mitigation bank must be supported by a formal, written banking instrument, prepared by an attorney and developed in coordination with the MBRT. Mitigation banks should be ecologically and administratively self-sustaining. Every effort must be made to avoid establishing banks that require regular or intensive maintenance. Generally, mitigation banks must be functioning in accordance with the success criteria for each particular bank prior to the withdrawal of credits.

Credit may be given for preserving existing wetlands and/or other aquatic resources when coupled with restoration activities. On a case-by-case basis, the MBRT will consider preservation based on the following factors:

- Size of the area to be preserved
- Quality and/or uniqueness of the resource
- Proximity of the site to other bank properties
- Proximity of the site to other public resources
- Degree to which the area performs important physical, chemical or biological functions, the protection and maintenance of which is important to the region where those aquatic functions are located
- Demonstrable threat to the resource
- II. Prospectus. A prospectus is prepared by the bank sponsor and submitted to the Corps of Engineers to initiate the planning and review process. Information provided in the prospectus will serve as the basis for establishing the mitigation banking instrument. (See Prospectus Information on web site).
- III. Development of the Mitigation Banking Instrument. All mitigation banks must have a banking instrument as documentation of MBRT concurrence on the objectives and administration of the bank. The banking instrument should describe in detail the physical and legal characteristics of the bank and how the bank will be established and operated. For regional banking programs, it may be appropriate to establish and "umbrella" instrument for the establishment and operation of multiple bank sites. The terms and conditions of a banking instrument may be amended in accordance with the procedures used to establish the instrument and subject to agreement by the signatories. (See on website: Model Mitigation Banking Instrument for Non-umbrella banks and Model Mitigation Banking Instrument for Umbrella banks.)
- IV. Mitigation Bank Threshold Issues.
- A. Geographic Service Area. The Regulatory Division utilizes a watershed-based approach when determining compensatory mitigation requirements. The geographic

service area (GSA) of a bank is the designated area wherein a bank can reasonably be expected to provide appropriate compensation for impacts to wetland or other aquatic resources. Accordingly, the GSA for wetland mitigation banks in North Carolina will be the 8-digit USGS Hydrologic Unit (HUC) within which the particular bank site is located. Should a distinct break in a physiographic ecoregion exist within a given 8-digit HUC, at the discretion of the MBRT, the size and location of the GSA may be limited to the 8-digit HUC and the specific physiographic ecoregion within which the bank property is located. Use of a bank site to compensate for impacts beyond the GSA may be considered by the Corps or other permitting agency on a case-by-case basis.

B. Wetland Credit Calculation. The Regulatory Division is currently involved in an interagency initiative to develop a wetland function assessment methodology for use in North Carolina. However, it is likely that even when such a methodology is developed, there may be instances where acreage is used to determine compensatory mitigation requirements. The following standard is designed to ensure that there is no net loss of wetlands due to the use of a bank. Until such time that a wetland function assessment methodology is developed, tested and approved, the Wilmington District will calculate mitigation bank wetland credits as follows:

Ratio

Restoration Acres (R) = (1:1)

Enhancement Acres (E) = (2:1)

Creation Acres (C) = (3:1)

Preservation Acres (P) = (5:1)

It is anticipated that in most cases in which the Corps, after consultation with the MBRT, has determined that mitigation credits from a bank may be used to offset wetland impacts authorized by Section 404 permits, for every one acre of impacts, two credits will be debited from the bank. One of those credits must be a restoration credit; the remaining credit will be made up of any combination of restoration, enhancement, creation or preservation credits, as selected by the bank sponsor and approved by the Corps during its permit process. Deviations from this compensation ratio may be authorized by the Corps on a case-by-case basis where justified by considerations of functions of the wetlands impacted, the severity of the wetland impacts, whether the compensatory mitigation is in-kind, and the physical proximity of the wetland impacts to the bank site, except that in all cases, a minimum of a one-to-one ratio of impact acres to restoration mitigation credits (acres) must be met.

C. Stream Credit Calculation. The Regulatory Division is currently involved in an interagency initiative to develop a stream function assessment methodology for use in North Carolina. However, it is likely that even when such a methodology is developed,

there may be instances where linear-feet of stream is used to determine compensatory mitigation requirements.

- D. Wetland Credit Release Schedule. If deemed appropriate by the MBRT, fifteen percent (15%) of a bank's total restoration credits shall be available for sale immediately upon completion of all of the following:
- 1. Execution of the mitigation banking instrument by the Sponsor, the Corps, and other agencies eligible for membership in the MBRT who choose to execute the agreement;
  - 2. Approval of the final mitigation plan;
  - 3. Delivery of the financial assurances;
- 4. Recordation of the preservation mechanism, as well as a title opinion acceptable to the Corps covering the property;

Additionally, no later than the first full growing season following initial debiting of the bank, the Sponsor must complete the initial physical and biological improvements to the bank site pursuant to the mitigation plan. Subject to a bank sponsor's continued satisfactory completion of all required success criteria and monitoring, additional restoration mitigation credits will be available for sale by a bank sponsor on the following schedule:

- 10% after first year, if interim success measures are met (total 25%);
- 10% after second year; if interim success measures are met (total 35%);
- 10% after third year; if interim success measures are met (total 45%);
- 15% after fourth year; if interim success measures are met (total 60%);
- 15% after fifth year, if Success Criteria are met (total 75%); and
- 25% after fifth year, if the bank site meets the overall objectives and Success Criteria set forth in the mitigation plan (total 100%).

The above schedule applies only to the extent that the bank sponsor documents acceptable survival and growth of planted vegetation, and attainment of acceptable wetland hydrology as described under the success criteria in the mitigation plan. The final 25% of credits will be available for sale only upon a determination by the MBRT of functional success as defined in the mitigation plan. For the purposes of this guidance, the Wilmington District adopts the stance that in the absence of a sanctioned functional assessment methodology, the collective best professional judgment of the Corps Project Manager and resource agencies will be utilized to make decisions in this regard.

## E. Stream Credit Release Schedule

- F. Financial Assurances. The bank sponsor shall provide financial assurances in a form acceptable to the MBRT sufficient to assure completion of all remaining mitigation work, required reporting and monitoring, and any remedial work required pursuant to the MBI. The sponsor must describe the definitive arrangement for financial assurances. The preferred method is to arrive at an estimate of the cost of doing the mitigation work and obtaining a performance bond(s), irrevocable letter of credit, or escrow agreement in that amount for that purpose. Such considerations include, but are not limited to, site design; topographic and boundary surveys; purchase, installation and maintenance of hydrology monitoring devices; sediment and erosion control; grading; re-grading contingency (+30% of grading cost); planting; replanting contingency (+30% of planting cost); control and/or eradication of undesirable plant species; control of herbivory; measures to control access and human impacts; As-Built surveys; five years of monitoring; land acquisition and/or easement acquisition and preparation costs; and Corps administrative expenses (10% of estimated costs), for each credit released for sale. Financial assurances structured to provide funds to the Corps of Engineers in the event of default by the Bank Sponsor are not acceptable. Such assurances may be phased out or reduced once the project has been demonstrated functionally mature and self-sustaining in accordance with the success criteria.
- G. Site Protection. The bank sponsor must arrange for the final disposition of all bank properties, either in the form of a conservation easement to an acceptable third party, or other mechanism. Such arrangements should effectively restrict harmful activities that might otherwise jeopardize the purpose and functioning of the mitigation bank. These prohibitions include, but are not limited to: filling; grading; excavating; earth movement of any kind; construction of roads, walkways, buildings, signs, or any other structure; any activity that may alter the drainage patterns on the property; the destruction, mowing, or other alteration of vegetation on the property; disposal or storage of any garbage, trash, or other waste material; or any other activity which would result in the bank properties being adversely impacted or destroyed. Conservation easements are the preferred preservation mechanism. (See Model Conservation Easement on website).

Additionally, the sponsor shall deliver a title opinion acceptable to the Corps covering the mitigation property. The property shall be free and clear of any encumbrances that would conflict with its use as mitigation, including, but not limited to, any liens that have priority over the recorded preservation mechanism.

The sponsor grants the preservation mechanism in a form acceptable to the MBRT and sufficient to protect the Bank site in perpetuity. This shall be perpetual, preserve all natural areas, and prohibit all use of the property inconsistent with its use as mitigation property, including any activity that would materially alter the biological integrity or functional and educational value of wetlands within the bank site, consistent with the mitigation plan.

- H. Accounting Procedures. The sponsor shall develop accounting procedures for maintaining accurate records of debits made from the bank that is acceptable to the MBRT. Such procedures shall include the generation of a debit report by the sponsor documenting all credits used at the time they are debited from the bank. Debit reports shall be provided to each member of the MBRT within 30 days of the date of credit sale. In addition, the sponsor shall prepare an Annual Report to be provided to each MBRT member within thirty (30) days of each anniversary of the date of execution of this MBI, showing all credits used and the balance of credits remaining. The sponsor's reporting obligations hereunder shall end upon the sale of all credits or termination of this MBI, whichever event first occurs. (See Model Debit Ledger on website.)
- I. Consideration of Upland Areas. Under limited circumstances, credit may be given for inclusion of upland areas within a compensatory mitigation project to the degree that the protection and management of such areas is an enhancement of aquatic functions and increases the overall ecological functioning of the mitigation site, or of other aquatic resources within the watershed (see Federal Mitigation Banking Guidance and Nationwide Permit General Condition 19 on web site). Such enhancement may be reflected in the amount of credit attributed to the mitigation project. The establishment of buffers in upland areas may only be authorized as mitigation if the Regulatory Division determines that this is best for the aquatic environment on a watershed basis. In making this determination, the Regulatory Division considers whether the wetlands or other aquatic resources being buffered: 1) perform important physical, chemical, or biological functions, the protection and maintenance of which is important to the region where those aquatic resources are located; and 2) are under demonstrable threat of loss of substantial degradation from human activities that might not otherwise be avoided.
- J. Consideration of Riparian Areas. The Regulatory Division may give credit for inclusion of riparian areas within a compensatory mitigation project to the degree that the protection and management of such areas is an enhancement of aquatic functions and increases the overall ecological functioning of the mitigation site, or of other aquatic resources within the watershed. Such enhancement may be reflected in the amount of credit attributed to the mitigation project. The establishment of buffers in riparian areas may only be authorized as mitigation if the Regulatory Division determines that this is best for the aquatic environment on a watershed basis. In making this determination, the Regulatory Division considers whether the streams or other aquatic resources being buffered: 1) perform important physical, chemical, or biological functions, the protection and maintenance of which is important to the region where those aquatic resources are located; and 2) are under demonstrable threat of loss of substantial degradation from human activities that might not otherwise be avoided.